

ABSTRACT OF DISCLOSURE

A host system is provided with one or more host-fabric adapters installed therein for connecting to a switched fabric of a data network. The host-fabric adapter may comprise a Micro-Engine (ME) arranged to establish connections and support data transfers via a switched fabric; a serial interface arranged to receive and transmit data packets from the switched fabric for data transfers; a host interface arranged to receive and transmit host data transfer requests, in the form of descriptors, from the host system for data transfers; a Receiver Header Hardware Assist (HWA) Mechanism configured to check header information of incoming data packets host descriptors for header errors so as to offload the Micro-Engine (ME) from having to check for header errors; and a Transmitter Header Hardware Assist (HWA) Mechanism configured to generate OpCode and Length fields for an outgoing data packet when an entire data packet is being assembled for transmission, via the serial interface, so as to offload the Micro-Engine (ME) from having to build all data packets for data transfers.